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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,508	03/31/2004	Hanan Kupferman	K35A1431	8222

35219 7590 08/11/2005

WESTERN DIGITAL TECHNOLOGIES, INC.
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EXAMINER

MERCEDES, DISMERY E

ART UNIT	PAPER NUMBER
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2651

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/815,508

Applicant(s)

KUPFERMAN, HANAN

Examiner

Dismery E. Mercedes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-23 rejected under 35 U.S.C. 103(a) as being unpatentable by Cloke (US 6,411,452 B1) in view of Rezzi et al. (US 6,201,652 B1).

As to Claim 1, Cloke discloses a moveable head to perform track following; a disk having a circumferential track, the circumferential track having a plurality of embedded servo wedges utilized in track following, the plurality of wedges being spaced sequentially around a circumference of the circumferential track (as depicted in Figs 1D-3B); and a synch mark detection circuit having a first detection mode wherein, in the first detection mode, the synch mark detection circuit detects a servo synchronization signal based on the head reading a servo synchronization mark (SSM) of a servo header of an embedded servo wedge (as depicted in Fig.3A and Fig.7).

Cloke fails to particularly disclose wherein the synch mark detection circuit detects a servo synchronization signal based on the head reading a SSM and a wedge identifier (ID) (or sector ID) of a servo header of an embedded servo wedge, the wedge ID being utilized in conjunction with the SSM to validate the servo synchronization signal.

However, Rezzi et al. discloses such (as depicted in Fig.1, "12,14,16,18"). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to

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modify Cloke's device by implementing a synch detection as disclosed by Rezzi et al., the motivation being because it would provide Cloke's device with the enhanced capability of detecting encoded servo information by using a Viterbi detector eliminating state changes that would be caused by prohibited adjacent data state combinations (as taught by Rezzi et al., col.4, lines 45-51).

As to Claim 2, Rezzi et al. further discloses wherein a substantial majority of the plurality of embedded servo wedges each include a servo header having a concatenated SSM and wedge ID for detecting a servo synchronization signal when read by the head (as depicted in Fig.1, "16,18").

As to Claims 3 and 4, Cloke further discloses wherein the concatenated SSM and wedge ID is located adjacent to a phase lock loop (PLL) field (as depicted in Fig.3A, "74, 76"), and (as per claim 4) wherein the concatenated SSM and wedge ID (or sector ID) is located adjacent to a track identification field (TKID) (as depicted in Fig.3A, "76,78").

As to Claim 5, Rezzi et al. further discloses wherein the synch mark detection circuit to further, receive a first SSM and a first wedge ID; and decode the first SSM and the first wedge ID (as depicted in Fig.2).

As to Claim 6, Cloke further discloses wherein the synch mark detection circuit to further, receive a second SSM and a second wedge ID; decode the second SSM and the second wedge ID; and determine if the second wedge ID has incremented at an expected rate (as depicted in Fig.3A, if the second wedge did not "increment" a synch error will occur).

As to Claims 7-8 have similar have limitations similar to those treated in the above rejections and are met by the references as discussed above.

As to Claims 9-15 are methods claims drawn to the apparatus of claims 1-8 are therefore rejected for the reasons as set forth in the rejections of claims 1-8.

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As to Claims 16-23 have limitations similar to those treated in the above rejections and are met by the references as discussed above.

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Ozdemir (US 2003/0048560); Glover (US 6,108,153); Christiansen et al. (US 6,603,622); Yamamoto et al. (US 6,058,084); Tuttle et al. (US 6,108,151).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dismery E. Mercedes whose telephone number is 571-272-7558. The examiner can normally be reached on Monday - Friday, from 9:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dismery E Mercedes
Examiner
Art Unit 2651

DM


for SPE D. Hudspeth